TABLE 23

For companies that performed foreign R&D, domestic and foreign R&D paid for by the company and others and performed by the company, by type of R&D and selected industry: 2017

(Millions of U.S. dollars)

| Industry | NAICS code | Total | Paid for by the company | Paid for by others | Research (basic and applied) | | | Development | | |
|--|-------------------------|---------|-------------------------|--------------------------|------------------------------|-------------------------|--------------------------|-------------|-------------------------|--------------------|
| | | | | | Total | Paid for by the company | Paid for by others | Total | Paid for by the company | Paid for by others |
| | | Т | otal domestic | R&D perfor | mance | | | | | |
| All industries | 21-23, 31-33, 42- 81 | 300,472 | 266,198 | 34,274 | 56,861 | 47,832 | 9,029 | 243,612 | 218,366 | 25,245 |
| Manufacturing industries | 31-33 | 192,459 | 169,176 | 23,284 i | 43,304 | 37,559 | 5,746 | 149,155 | 131,617 | 17,538 |
| Chemicals | 325 | 44,441 | 43,012 | 1,428 | 16,127 | 15,520 | 607 | 28,314 | 27,493 | 822 |
| Pharmaceuticals and medicines | 3254 | 38,514 | 37,468 | 1,046 | 14,343 | 13,873 - 14,119 | 224 - 470 | 24,172 | 23,349 - 23,595 | 577 - 822 |
| Other chemicals | other 325 | 5,926 | 5,544 | 382 | 1,784 | 1,401 - 1,647 | 137 - 383 | 4,143 | 3,898 - 4,143 | 0 - 245 |
| Computer and electronic products | 334 | 67,751 | 63,380 | 4,371 | 11,258 | i 10,543 i | 715 | 56,493 | 52,838 | 3,656 |
| Semiconductor and other electronic components | 3344 | 26,962 | 26,552 | 410 | 5,003 | i 4,958 i | 45 | 21,959 i | 21,594 | 365 |
| Other computer and electronic products | other 334 | 40,789 | 36,828 | 3,961 | 6,255 | 5,584 | 671 | 34,534 | 31,244 | 3,290 |
| Nonmanufacturing industries | 21-23, 42-81 | 108,013 | 97,022 | 10,991 | 13,557 | 10,273 | 3,283 | 94,456 | 86,749 | 7,707 |
| Information | 51 | 69,447 | 68,976 | 471 | 6,052 | 5,974 | 77 | 63,395 | 63,002 | 394 |
| Software publishers | 5112 | 30,875 | 30,458 | 418 | 2,914 | 2,863 | 50 | 27,962 | 27,594 | 367 |
| Other information | other 51 | 38,572 | 38,518 | 54 | 3,138 | 3,111 | 27 | 35,434 | 35,407 | 26 |
| Professional, scientific, and technical services | 54 | 21,228 | 10,803 | 10,425 | 5,543 | 2,343 | 3,200 | 15,685 | 8,460 | 7,225 |
| Scientific R&D services | 5417 | 9,931 | 553 | 9,378 | 2,864 | 93 | 2,771 | 7,067 | 460 | 6,607 |
| Other professional, scientific, and technical services | other 54 | 11,298 | 10,250 | 1,047 | 2,679 | 2,251 | 428 | 8,619 | 8,000 | 619 |
| | | • | Total foreign F | R&D perform | nance | | | | | |
| All industries | 21-23, 31-33, 42- 81 | 87,528 | 78,689 | 8,839 | 17,141 | 15,175 i | 1,966 | 70,387 | 63,514 | 6,873 |
| Manufacturing industries | 31-33 | 57,270 | 55,706 | 1,564 | 11,986 | 11,638 | 348 | 45,284 | 44,067 | 1,217 |
| Chemicals | 325 | 14,450 | 14,043 | 407 | 3,976 | 3,810 | 167 | 10,474 | 10,234 | 240 |
| Pharmaceuticals and medicines | 3254 | 11,976 | 11,587 | 390 | 3,252 | 3,099 i | 153 | 8,725 | 8,488 | 237 |
| Other chemicals | other 325 | 2,474 | 2,456 | 17 | 725 | 711 | 14 | 1,749 | 1,746 | 3 |
| Computer and electronic products | 334 | 22,648 | 22,242 | 405 | 4,681 | i 4,591 i | 91 | 17,967 i | 17,652 | 315 |
| Semiconductor and other electronic components | 3344 | 10,898 | 10,749 | 149 | 2,079 | i 2,077 i | 3 | 8,818 i | 8,673 | 146 |
| Other computer and electronic products | other 334 | 11,750 | 11,493 | 257 | 2,602 | i 2,514 i | 88 | 9,148 | 8,979 | 169 |
| Nonmanufacturing industries | 21-23, 42-81 | 30,258 | 22,983 | 7,275 | 5,155 | 3,537 i | 1,619 | 25,103 i | 19,446 | 5,656 |
| Information | 51 | 14,646 | 14,620 | 26 i | 1,236 | 1,232 | 4 | 13,410 | 13,388 | 22 |
| Software publishers | 5112 | 8,824 | 8,817 | 7 | 807 | 807 | * | 8,017 | 8,009 | 7 |

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(Millions of U.S. dollars)

| | | | | | Research (basic and applied) | | | Development | | |
|--|------------|--------|-------------------------|--------------------------|------------------------------|-------------------------|--------------------------|-------------|-------------------------|--------------------|
| Industry | NAICS code | Total | Paid for by the company | Paid for by others | Total | Paid for by the company | Paid for by others | Total | Paid for by the company | Paid for by others |
| Other information | other 51 | 5,822 | 5,803 | 18 i | 428 | i 425 i | 4 | 5,394 i | 5,379 i | 15 |
| Professional, scientific, and technical services | 54 | 11,064 | 3,892 | 7,172 | 2,301 | 685 - 702 i | 1,599 - 1,616 | 8,763 i | 3,190 - 3,207 | 5,556 - 5,574 i |
| Scientific R&D services | 5417 | 7,124 | 82 | 7,042 | 1,549 | 17 | 1,533 | 5,574 i | 65 | 5,509 i |
| Other professional, scientific, and technical services | other 54 | 3,940 | 3,810 | 131 | 751 | 668 - 685 i | 66 - 83 | 3,189 | 3,124 - 3,142 | 47 - 65 i |

^{* =} amount < \$500,000; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

Note(s)

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed foreign R&D. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s)

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2017.